

SAMSUNG TECHWIN

SAMSUNG

SALES NETWORK

• **SAMSUNG TECHWIN CO., LTD.**

145-3, Sangdaewon-dong, Jungwon-gu, Seongnam-si, Gyeonggi-do, 462-120, Korea
TEL : +82-31-740-8132-6 FAX : +82-31-740-8144

• **SAMSUNG OPTO-ELECTRONICS UK, LTD.**

Samsung House, 1000 Hillswood Drive, Hillswood Business Park Chertsey, Surrey KT16 0PS
TEL : +44-1932-45-5308 FAX : +44-1932-45-5325

www.samsungtechwin.com
www.samsungcctv.com

P/No. : Z6806083201B
VAN 07. 11

SAMSUNG

Supreme Image
560TVL, 128x WDR



High Resolution WDR V/F Dome Camera SID-560 User's Manual

Thank you for purchasing a SAMSUNG CCD CAMERA.
Before attempting to connect or operate this product,
please read these instructions carefully and save this manual for future use.

ENGLISH

Before operating the camera, confirm the camera model and proper input power voltage. In order to that you can understand this manual thoroughly, we'll introduce our model description.

■ SID-560 SERIES

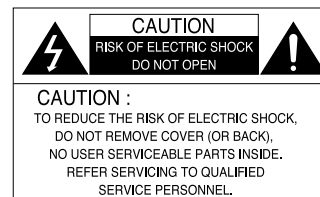
- NTSC MODEL
SID-560N
- PAL MODEL
SID-560P

■ MODEL DESCRIPTION

- SID-560X

└ SIGNAL SYSTEM

- SIGNAL SYSTEM
N — NTSC MODEL
P — PAL MODEL



The lightning flash with an arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

INFORMATION - This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING - Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

WARNING - To prevent electric shock and risk of fire hazards:

- ◆ Do NOT use power sources other than that specified.
- ◆ Do NOT expose this appliance to rain or moisture.

This installation should be made by a qualified service person and should conform to all local codes.

Features

Ultra High Resolution

By adopting a double-speed 410,000 pixel Sony CCD, the camera produces clear picture quality with a horizontal resolution of 560 TV lines for color, and 700 TV lines for B/W.

Wide Dynamic Range (WDR):

By adopting a proprietary SV-IV DSP chip, the camera delivers clear, high quality pictures even in backlight, by increasing exposure in dark areas while decreasing it in bright areas; a corrected image with clear details results.

Excellent Sensitivity

Adopting a Diagonal 6mm (1/3"), highly sensitive CCD and digital signal processing technology, it can clearly distinguish the outline and color of a subject in an extremely low luminance environment – even, for example, under starlight. Since surveillance is possible in places where the light is poor, the camera is appropriate for day and night surveillance outdoors or on the outside of buildings.

- 0.00004 Lux (B/W Sens-up Mode)

SSNR (Samsung Super Noise Reduction) Function

The high performance SV-IV DSP chip dramatically reduces the gain noise in digital image processing, producing clear, sharp images in low lighting environments.

Day & Night

The camera identifies whether it is day or night and automatically switches to the appropriate mode, depending on its environment. By day, the camera switches to color mode in order to maintain optimal color. At night, it switches to B/W mode so as to obtain better picture definition.

DIS (Digital Image Stabilizer)

The DIS function compensates for any camera movement, to produce more stable pictures.

Sub Monitor Function

The sub monitor function enables easy adjustment of the camera angle within the monitoring range during its installation.

3-Axis camera mechanism

The SID-560 is especially incredibly flexible to install with its 3-axis camera construction, which makes the camera wall or slope mountable.

Miscellaneous Functions

SENS-UP, FREEZE, FLIP (H/V-REV), D-ZOOM, SHARPNESS, MOTION DETECTION and PRIVACY functions are provided.

RS-485 Communication Control Support

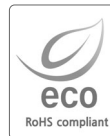
Remote OSD menu control via an RS-485 interface is supported.

OSD

The camera control is convenient by using 7 different foreign language O.S.D.

- NTSC : Korean, English, Spanish, Japanese

- PAL : English, French, German, Spanish, Italian, Chinese



Samsung Techwin cares for the environment at all product manufacturing stages to preserve the environment, and is taking a number of steps to provide customers with more environment-friendly products. The Eco mark represents Samsung Techwin's will to create environment-friendly products, and indicates that the product satisfies the EU RoHS Directive.

Warnings & Cautions

This information is provided to ensure your safety and to prevent any losses, financial or otherwise. Please read it carefully and use the product accordingly.

- * For product inquiries, please contact the retail shop where you bought the camera. The use of equipment such as an aerial ladder while providing after-sales service shall be at your expense.
- * Separate the power plug when thunder crashes or lighting flashes.
- * This product is support equipment for surveillance system. Therefore, we can't compensate for material loss and/or personal injuries by robbery, fire, natural disaster or something like this type.

Warning/Attention/Special Mark Messages

	Ignoring this information may result in material loss and/or serious personal injuries including death.		Ignoring this information may result in material loss and/or a slight injuries.
	Indicates "Never Allowed."		Indicates "No Disassembling."



Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Contents

Precautions	8
-------------	---

Components and Accessories	10
----------------------------	----

Overview	11
----------	----

Installation	13
--------------	----

- Installation 13
- Adjust the panning and tilting, rotating while watching the monitor 15

Connection	16
------------	----

- Connecting To Monitor 16
- Connecting To Power 17
- RS-485 communication control 18

Operating Your Camera	19
-----------------------	----

- Menu Configuration 19
- Menu Setup 20
 - LENS 21
 - EXPOSURE 22
 - WHITE BALANCE 24
 - BACKLIGHT 26
 - SSNR 28
 - DAY/NIGHT 29
 - IMAGE ADJ 30
 - SPECIAL 32
 - EXIT 36

Troubleshooting	37
-----------------	----

Specification	39
---------------	----

Dimension	40
-----------	----



Precautions

Do not install the camera in extreme temperature conditions.



Only use the camera under conditions where temperatures are between -10°C and $+50^{\circ}\text{C}$. Be especially careful to provide ventilation when operating under high temperatures.

Do not install or use the camera in an environment where the humidity is high.



It can cause the image quality to be poor.

Do not install the camera under unstable lighting conditions.



Severe lighting change or flicker can cause the camera to work improperly.

Do not touch the front lens of the camera.



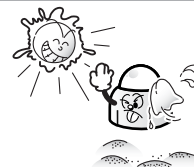
It is one of the most important parts of the camera. Be careful not to be stained by fingerprint.

Do not drop the camera or subject them to physical shocks.



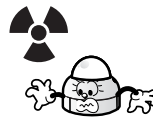
It can cause malfunctions to occur.

Never keep the camera face to strong light directly.



It can damage the CCD.

Do not expose the camera to radioactivity.



If it is exposed to radioactivity, For heated CCD, it will be out of order.

Notes

- If the camera is exposed to spotlight or object reflecting strong light, smear or blooming may occur.
- Please check that the power satisfies the normal specification before connecting the camera.

Components and Accessories

1. SID-560



2. Instruction Manual



3. M4 Tapping Screw 4EA



4. M4 Machine Screw 4EA



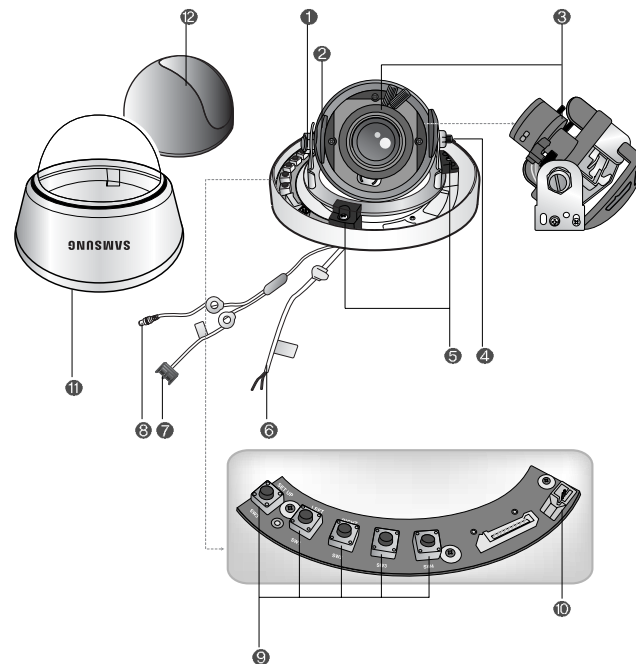
5. Adapter plate



6. Installation Video Output Cable



Overview



- ❶ **Pan Base**
control panning angle of camera
- ❷ **Rotate Base**
control rotating angle of camera
- ❸ **X2.5 Vari-focal Lens Module**
- ❹ **Rotate Base Holding Screw**
fix rotated position
- ❺ **Pan Base Holding Screws (Color : Silver)**
fix panned position
- ❻ **RS-485 Control Cable** : The detailed description refers to p18
- ❼ **Power Input Jack**
- ❽ **Video Output Jack**
- ❾ **Function Setup Button**
 - SET Button : Displays the menu on the screen. Press this button to confirm status or after changing a selected item.
 - Left and Right Button : Used to move the cursor left or right in the menu screen or to change the value of the selected item.
 - Up and Down Button : Used to move the cursor up or down in the menu screen to select a desired menu item.
- ❿ **Video Output Terminal to Monitor**
- ⓫ **Dome Cover**
- ⓬ **Shield Case**

Installation

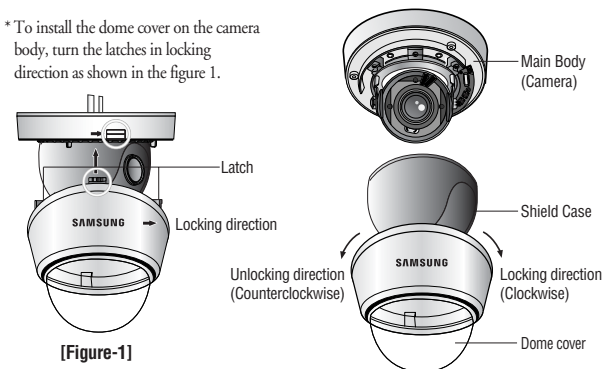


Notes

- The installation should be done by qualified service personnel or sysstem installers.
- If the ceiling material is not strong enough to hold the installation screws, the camera may fall off. Reinforce the ceiling as needed.

- 1) Separate the dome cover by clockwise rotation.
- 2) Separate the shield case by pulling from the camera body.

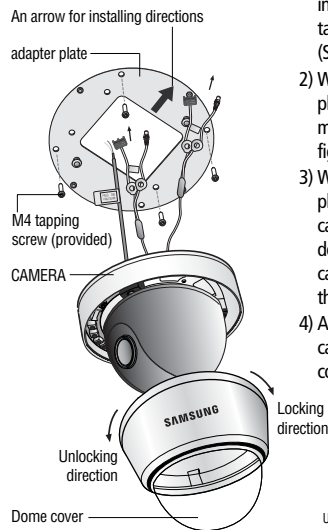
* To install the dome cover on the camera body, turn the latches in locking direction as shown in the figure 1.



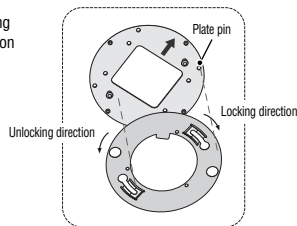
[Figure-1]

Installation

When installing on a adapter plate



- 1) Place the bracket provided on the installation surface and fix it with the M4 tapping screws (provided). (Select either 85X85 or 83.5X46)
- 2) When placing the camera body on the plate, insert the plate pin into the mounting hole on the body as shown in figure-1 and fix it by turning clockwise.
- 3) When placing the camera body on the plate, make sure the power and the BNC cables pass through their respective designated holes. (When placing the cable through its side, thread it through the hole at the bottom.)
- 4) After installation and adjustment of the camera are complete, secure the dome cover by turning it clockwise.

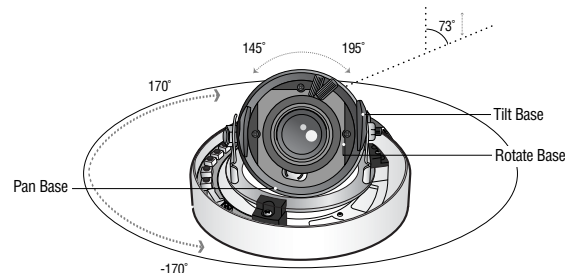


[Figure-1]

Notes

- Please locate an arrow on bracket for installing direction that you wish to observe Area and then fix it with the M4 tapping screws.

Adjust the panning and tilting, rotating while watching the monitor



- 1) You can adjust camera to any direction by using Pan, Tilt, Rotate mechanism.

- Pan Base moves by 170° to each side direction and 340° on the whole.
- Tilt Base covers total 146° angle (73° to each side).
- Angle range of Rotate Base is the same as that of Pan Base. But One side range is 195° and another is 145°.

- 2) Methods of adjustment

- The case of wall installation

- ① After mounting the camera on a wall, adjusting the panning angle so that the camera can face the direction to monitor when tilting.
- ② And then adjust the tilting angle by rotating the tilt base.
- ③ Loosen the rotate base hold screw and adjust rotate base for the best monitoring.
- ④ Tighten the rotate base hold screw.

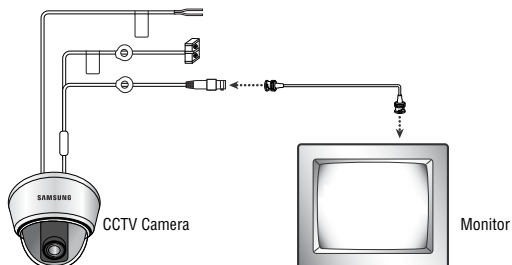
- The case of ceiling installation

- ① After mounting the camera on a ceiling, adjusting the panning angle for better monitoring area by rotating the pan base.
- ② And then adjust the tilting angle by rotating the tilt base.

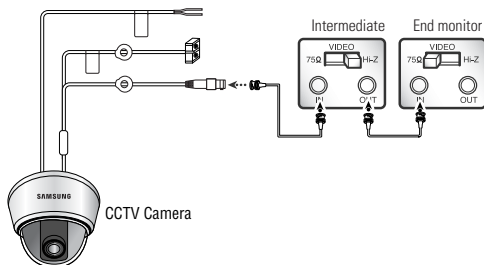
Connection

Connecting to Monitor

Connect the VIDEO-OUT jack to the VIDEO-IN jack of monitor.

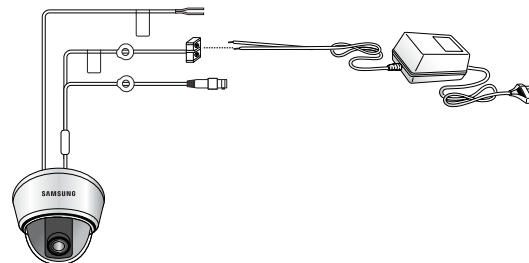


- As the connecting method varies with the instruments, refer to the manual supplied with the instrument.
- If necessary, you can connect the monitor to the REMOTE jack on the back of your camera.
- Only connect the cable when the power is turned off.
- Set the 75Ω / Hi-Z selection switch as shown below if you have an intermediate device.



Connecting to Power

Connect the adaptor to the power input connector as shown in the figure below. The recommended adaptor specification for SID-500N/SID-500P is DC 12V / 500mA.



When the resistance value of copper wire is at [20°C(68°F)]

Copper wire size (AWG)	#24(0.22mm ²)	#22(0.33mm ²)	#20(0.52mm ²)	#18(0.83mm ²)
Resistance (Ω / m)	0.078	0.050	0.030	0.018
Voltage Drop (V/m)	0.028	0.018	0.011	0.006

- As shown in the table above, voltage decreases as the wire gets longer. Therefore use of an excessively long adaptor output line for connection to the camera may affect the performance of the camera.

*Standard voltage for camera operation : DC 12V ± 10%

*There may be some deviation in voltage drop depending on the type of wire and the manufacturer.



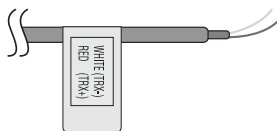
Notes

- Be sure to connect power only after all the installation is complete.
- Note that DC adaptor is not supplied with camera.
- Ground should be connected to the GND terminal.

Connection

RS-485 communication control

Connecting to RS-485 Control Cable



CONTROL CABLE	SPEC
RED (TRX+)	RS-485 +
WHITE (TRX-)	RS-485 -

Using a RS-485 communication, it will be able to control the OSD menu at the SAMSUNG TECHWIN System Controller or DVR.

(1) The case which it controls from the PC

Using a RS-485 converter, It connects to RS-485 control cable outside camera and serial cable

EX) SERIAL PORT OF THE PC(COM1) → SERIAL CABLE → RS-485 CONVERTER → RS-485 CONTROL CABLE

(2) The case which it controls from the DVR or System Controller

It connects the RS-485 control cable in the connection terminal of 485 control boards which are connected with the DVR or System Controller.

485 Control Board Connection Port	RS-485 Control Port
(+) CONNECTION TERMINAL	RED (TRX+)
(-) CONNECTION TERMINAL	WHITE (TRX-)

* RS-485 Communication establishment initial value

Item	Camera ID	BAUD RATE	UART MODE	PET PKT
Initial value	1	9600	8-NONE-1	ENABLE



Notes

- When you construct external control systems for a camera control, please use to the SAMSUNG TECHWIN PROTOCOL or PELCO-D PROTOCOL.
- When you connecting to RS-485 control cable, please peel off the outer skin inside the RS-485 control cable.

Operating Your Camera

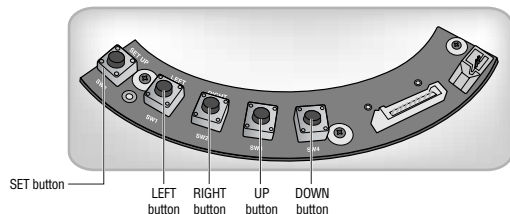
Menu Configuration

	Setup Menu
LENS	• DC
EXPOSURE	• SHUTTER • AGC • SENS-UP • RETURN
WHITE BALANCE	• ATW • MANUAL • AWC → SET • OUTDOOR • INDOOR
BACKLIGHT	• OFF • WDR • BLC
SSNR	• ON • OFF
DAY/NIGHT	• COLOR • B/W • AUTO
IMAGE ADJUSTMENT (IMAGE ADJ.)	• FREEZ • V-REV • H-REV • D-ZOOM • SHARPNESS • RETURN
SPECIAL	• CAMTITLE • MOTION DET • PRIVACY • DIS • COMM ADJ • LANGUAGE • RESET • RETURN
EXIT	

Operating Your Camera

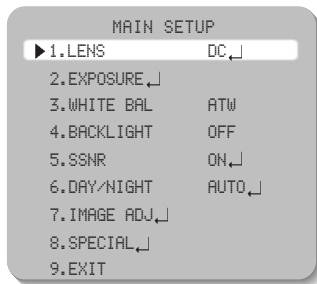
Menu Setup

Use the five buttons on back of the camera.



1. Press the SET button.

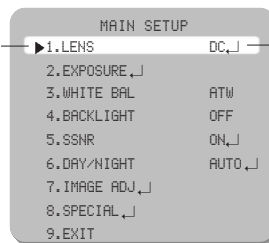
- Main setup menu is displayed on the monitor screen.



2. Select a desired function using the Up and Down buttons.

- Place the cursor over a desired item.

Select the function using the UP or DOWN button.



Change the status using the LEFT or RIGHT button.

3. Set up a selected item by using the Left and Right buttons.

4. To finish the setting, select 'EXIT' and press the SET button.



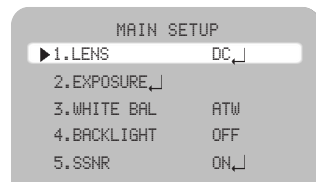
Notes

- An item with the ↵ icon also has sub menus. To select a sub menu, select an item with the icon and press the SET button.
- An item with the --- icon is unavailable due to function settings.

LENS

Using this function, you can control screen brightness.

1. When the SETUP menu screen is displayed, select 'LENS' by using the Up and Down buttons so that the arrow indicates 'LENS'.



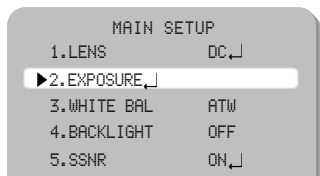
Operating Your Camera

DC : Select Auto Iris Lens

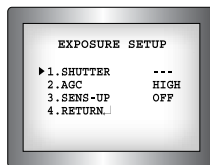
- When DC is selected, you can control screen brightness. The range of brightness control is between 1 and 70. Adjust the brightness appropriately for optimal screen brightness.



EXPOSURE



- When the SETUP menu screen is displayed, select 'EXPOSURE' by using the Up and Down buttons so that the arrow indicates 'EXPOSURE'.
- Select a desired mode using the Up and Down buttons.



SHUTTER : You can select either auto or manual shutter.

- A.FLK : Select this when you experience picture flicker, which can happen when there is a dash with the frequency of the installed lighting.
- ESC : Select this to control the shutter speed automatically. If ESC is selected, the shutter speed is automatically controlled depending on the ambient illumination of the subject.
- MANUAL : You can control shutter speed manually.



Notes

- When the SHUTTER is set to MANUAL or A.FLK mode, SENS-UP will be disabled.

AGC (AUTO GAIN CONTROL) :

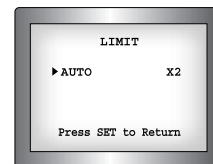
The higher the gain level, the brighter the screen - but the higher the noise.

- OFF : Deactivates the AGC function.
- LOW : Allows automatic gain control from 0 to 30dB.
- HIGH : Allows automatic gain control from 0 to 42dB.

SENS-UP :

When it is night or dark, the camera automatically detects the light level and maintains a clear picture if this mode is activated.

- OFF : Deactivates the SENS-UP function.
- AUTO : Activates the SENS-UP function.



Operating Your Camera

RETURN :

Select this to save the changes in the EXPOSURE menu and return to the SETUP menu.

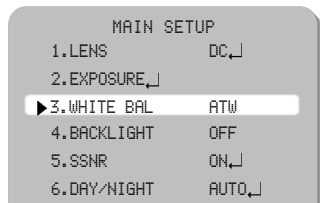
Notes

- If you press the SET button in 'AUTO' mode, You can adjust brightness by increasing or decreasing the shutter speed. (X2~X256)
- Note that the higher the zoom level, the brighter the screen, but the more likely it is that an after-image will appear.
- Although Noise, Spots, and Whitish symptoms may occur in SENS-UP operation when the zoom level is increased, this is normal.

White Balance (White Bal.)

Use the White Balance function to adjust the screen color.

1. When the SETUP menu screen is displayed, select 'White Bal.' by using the Up and Down buttons so that the arrow indicates 'White Bal.' .
2. Select a desired mode using the Up and Down buttons.

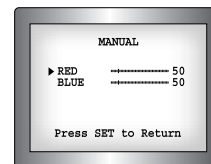


※ Select one of the following 5 modes, as appropriate for your purpose.

- ➡ ATW : Select this when the color temperature is between 1800°K and 10500°K
- ➡ INDOOR : Select this when the color temperature is between 4500°K and 8500°K.
- ➡ OUTDOOR : Select this when the color temperature is between 1800°K and 10500°K. (sodium light inclusion)

➡ AWC → SET : To find the optimal setting for the current luminance environment in this mode, set the point the camera towards a sheet of white paper and press the SET button. If the environment changes, readjust it.

➡ MANUAL : Select this to fine-tune White Balance manually. Set White Balance first by using the ATW or AWC mode. After that switch to MANUAL mode, fine-tune the White Balance and then press the SET button.



Notes

• White Balance may not work properly under the following conditions. In this case select the AWC mode.

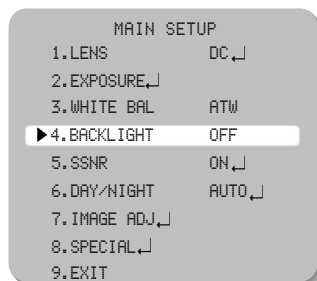
- ① When the color temperature of environment surrounding the subject is out of the control range (e.g. clear sky, or sunset)
- ② When the ambient illumination of the subject is dim.
- ③ If the camera is directed towards a fluorescent light or is installed in a place where illumination changes dramatically, the White Balance operation may become unstable.

Operating Your Camera

BACKLIGHT

This camera is designed so that it delivers a distinctive subject and background at the same time, even when the subject is in backlight, unlike conventional cameras, by adopting a proprietary SV-IV DSP chip.

1. When the SETUP menu screen is displayed, select 'BACKLIGHT' by using the Up and Down buttons so that the arrow indicates 'BACKLIGHT'.

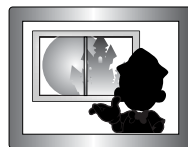


2. Select a desired mode using the Left and Right buttons depending on the camera purpose.

- WDR : When there are both bright and dark areas at the same time, this mode makes both areas distinctive.
- OFF : Deactivates the WDR function.



WDR

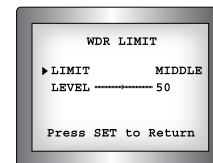


OFF

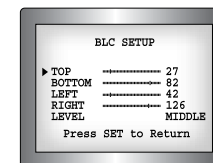
- BLC : Enables a user to directly select a desired area from a picture, and to view the area more clearly.

3. Select a desired mode using the Left and Right buttons and press the SET button.

- Select 'WDR' to adjust the WDR LIMIT and LEVEL.
 - LIMIT : Adjust the WDR Sensitivity by selecting LOW, MIDDLE, or HIGH.
 - LEVEL : Adjust the WDR Brightness by controlling the bar from 0 to 100.



- Select 'BLC' to adjust the area to be enhanced and enhancement level.



Notes

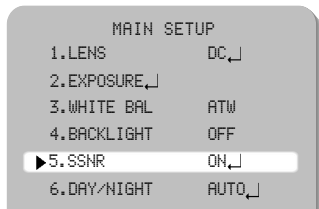
- You cannot use the WDR mode when MANUAL or A.FLK mode in 'SHUTTER' menu is selected.
- Since the following symptoms may occur according to the ambient illumination when WDR is selected, set it to OFF.
 - ① Color or screen changes unnaturally.
 - ② Noise appears in the bright part of the screen.
- Since the performance of the WDR function may be affected by the area of the bright part of the screen, optimize the installation angle for the best WDR performance.
- If you increase LIMIT, the screen display may be distorted.

Operating Your Camera

SSNR

This function reduces the background noise in a low luminance environment.

1. When the SETUP menu screen is displayed, select 'SSNR' by using the Up and Down buttons so that the arrow indicates 'SSNR'.



2. Select a desired mode using the Left and Right buttons.

- OFF : Deactivates SSNR. Noise is not reduced.
- ON : Activates SSNR so that noise is reduced.

3. Set the SSNR mode to 'ON' and press the SET button. Then you can adjust the noise reduction level.



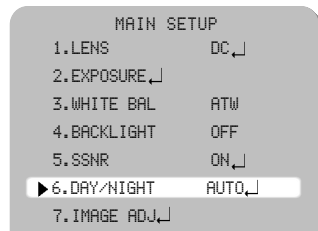
Notes

- You cannot set the SSNR to 'ON' or 'OFF' when the AGC mode of the EXPOSURE menu is 'OFF'.
- When adjusting the noise reduction level of the SSNR mode, remember that the higher the level set, the more the noise level will be reduced but that after image may also occur.

DAY/NIGHT

You can display pictures in color or black and white.

1. When the SETUP menu screen is displayed, select 'DAY/NIGHT' by using the Up and Down buttons so that the arrow indicates 'DAY/NIGHT'.



2. Select a desired mode using the Left and Right buttons according to the picture display you want.

- COLOR : The picture is always displayed in color.
- B/W : The picture is always displayed in black and white.
- AUTO : The mode is switched to 'Color' in a normal environment, but switches to 'B/W' mode when ambient illumination is low. To set up the switching time or speed for AUTO mode, press the SET button.



- DWELL TIME : You can select the duration time about changing the day/night mode. → 5s, 7s, 10s, 20s, 30s, 40s, 50s, 60s
- DURATION : You can select brightness of illumination about changing the day/night mode.

	Color → B/W	B/W → Color
Fast	2.5 lux	4 lux
Slow	0.8 lux	6 lux

* The brightness of illumination is changeable by installed environment.

Operating Your Camera

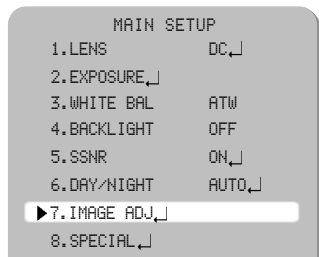
☞ **EXTERN** : This mode allows you to apply a desired filter to external signals.

Notes

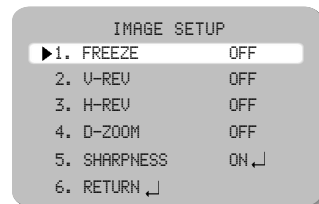
- When using a Video Auto Iris Lens, if you set the lens level to low, automatic switching between Color and Black & White may not occur.
- You cannot control the DAY/NIGHT menu when AGC in the EXPOSURE menu is 'OFF'. At this time, the exchange between DAY mode and NIGHT mode operates as like selecting 'COLOR' mode.
- The OSD key does not work for 3 seconds when switching to Color or B/W, to ensure stable camera operation.
- The camera may focus less well under infrared illumination than under normal illumination.
- Since the camera may not focus as well under infrared illumination at night as it does under normal illumination, install an Extra-low Dispersion Lens to obtain sharp pictures

IMAGE ADJ.

1. When the SETUP menu screen is displayed, select 'IMAGE ADJ.' by using the Up and Down buttons so that the arrow indicates IMAGE ADJ.



2. Select a desired mode using the Up and Down buttons.



☞ **FREEZE** : You can view still or moving pictures.

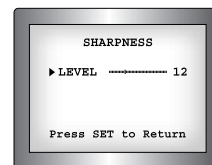
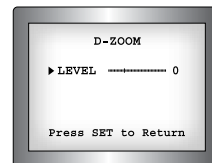
☞ **V-REV** : You can flip the picture vertically on the screen.

☞ **H-REV** : You can flip the picture horizontally on the screen.

☞ **D-ZOOM** : You can use a digital zoom of x1~x10.

☞ **SHARPNESS** :

As you increase this value, the picture outline becomes stronger and clearer. Adjust this value appropriately depending on the sharpness of the picture.



☞ **RETURN** : Select this to save the settings for the IMAGE ADJ. menu and to return to the SETUP menu.

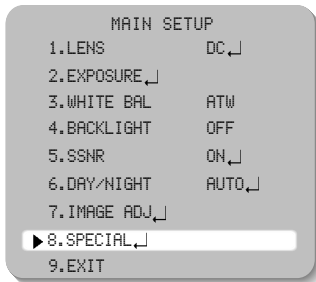
Notes

- When H-REV or V-REV is selected, any text in the picture also will be flipped horizontally or vertically.
- If you increase the SHARPNESS level too high, the picture may become distorted or noise may appear.

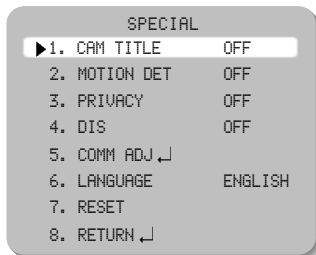
Operating Your Camera

SPECIAL

- When the SETUP menu screen is displayed, select 'SPECIAL' by using the Up and Down buttons so that the arrow indicates 'SPECIAL'.



- Select a desired mode using the Up and Down buttons.



- ◉ CAM TITLE : If you enter a title, the title will appear on the monitor.

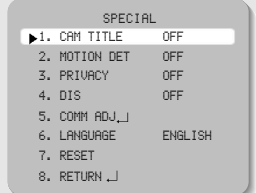
- If the SPECIAL menu screen is displayed, use the Up and Down buttons so that the arrow indicates 'CAM TITLE'.

- Set it to 'ON' by using the Left and Right buttons.

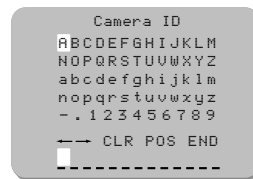


Notes

- When the CAM TITLE menu is 'OFF', no title will be displayed on the monitor screen even if you enter one.



- Press the SET button.



- Use the 4 direction buttons to move to a desired letter and select the letter by pressing the SET button. Repeat this to enter multiple letters. You can enter up to 15 letters.



Notes

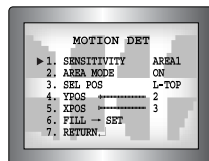
- If you move the cursor to CLR and press the SET button, all the letters are deleted. To edit a letter, change the cursor to the bottom left arrow and press the SET button. Move the cursor over the letter to be edited, move the cursor to the letter to be inserted and then press the SET button.

Operating Your Camera

- Enter a title, move the cursor to 'POS' and press the SET button. The entered title appears on the screen. Select the position to display the title on the screen by using the 4 direction buttons and press the SET button. When the position is determined, select 'END' and press the SET button to return to the SPECIAL menu.



- MOTION DET** : If you connect an alarm device to this camera, you can monitor activity more efficiently, because a signal is generated by the camera whenever motion is detected.



- When the SPECIAL menu screen is displayed, press the Up and Down buttons so that the arrow indicates 'MOTION DET'.
- Set up the mode using the 4 direction buttons.

- SENSITIVITY : You can select up to 8 MD areas. When SENSITIVITY number is high, motion detection sensitivity is increased to recognize even small movement.
- AREA MODE : Determines whether to use the MD area selected in SENSITIVITY.
- SEL POS : Determines which of the 4 vertices of each MD area is to be used.
- YPOS : Determines the coordinate of the vertical axis for SEL POS.
- XPOS : Determines the coordinate of the horizontal axis for SEL POS.
- FILL → SET : Fills in a selected MD area. Fills in a selected MD area. The color of filling is sequentially selected as brown, orange, blue, cyan, yellowish green, yellow and red.
- RETURN : Select this to save the MOTION DET menu settings and return to the SPECIAL menu.



Notes

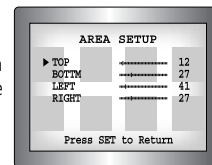
- MD areas show only MOTION DET menu. Therefore, MD areas don't display on the monitor screen.
- When motion is detected, "MOTION DETECTION" expression is displayed on the screen.

- PRIVACY** : Hide an area you want to hide on the screen.

- When the SPECIAL menu screen is displayed, press the Up and Down buttons so that the arrow indicates 'PRIVACY'.
- Set up the mode using the 4 direction buttons.



- AREA SEL : You can select up to 8 MD areas.
- AREA MODE : Determines whether to use the area selected in the AREA SEL, and the size and position of the area.



- MASK COLOR : Determine area color. You can select Gray, Green, Red, Blue, Black, White.
- TRANSP : Determine the transparency of selected area as controlling number from 0 to 3.
- RETURN : Select this to save the PRIVACY menu settings and return to the SPECIAL menu.



DIS (Digital Image Stabilizer) :

This function mitigates any picture movement due to external factors such as wind.



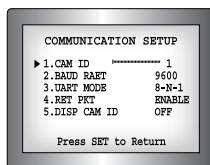
Notes

- The chance of resolution decrease is existed because DIS function uses the digital zoom.
- DIS doesn't operate when background illumination is too low.
- DIS doesn't operate when object pattern is monotonic as like sky or white wall.

Operating Your Camera

COMM ADJ (Communication Adjustment):

This function sets up the camera communication status when controlling the camera through an external control device.



- ① When the SPECIAL menu screen is displayed, press the Up and Down buttons so that the arrow indicates 'COMM ADJ'.
 - ② Set up the mode using the 4 direction buttons.
 - CAM ID : Determines the camera's identification number (between 0 and 25).
 - BAUD RATE : You can select 2400/4800/9600/19200/38400/57600 bps.
 - UART MODE : You can select NONE, EVEN or ODD for the parity bits.
 - RET PKT : Determines whether to send a command back to the controller device when a communication control command is sent to the camera.
 - DISP CAM ID : Display camera title on top left corner of the screen.
- LANGUAGE : You can select the menu language according to your requirements.
 ○ RESET : Resets the camera settings to the factory defaults.
 ○ RETURN : Select this to save the SPECIAL menu settings and return to the SPECIAL menu.

EXIT

Press the SET button in the EXIT menu to save the current settings and exit the SET menu.

Troubleshooting

Refer to the following table if you are experiencing trouble with your camera. Contact an authorized technician if the table does not provide you with a solution to the trouble.

Problem	Solution
Nothing appears on the screen.	<ul style="list-style-type: none"> • Check that the power cord and line connection between the camera and monitor are fixed properly. • Check that you have properly connected VIDEO cable to the camera VIDEO output jack.
The image on the screen is dim.	<ul style="list-style-type: none"> • Is lens stained with dirt? Clean your lens with soft, clean cloth. • Set the monitor to proper condition. • If the camera is exposed to too strong light, change the camera position.
The image on the screen is dark.	<ul style="list-style-type: none"> • Adjust the contrast feature of the monitor. • If you have an intermediate device, set the 75Ω / Hi-z properly.
The camera is not working properly, and the surface of the camera is hot.	<ul style="list-style-type: none"> • Check that you have properly connected the camera to an appropriate power source.
The DAY/NIGHT menu does not work.	<ul style="list-style-type: none"> • Check that AGC of EXPOSURE SETUP menu is 'OFF'.
The SENS-UP function does not work.	<ul style="list-style-type: none"> • Check that AGC of EXPOSURE SETUP menu is 'OFF'. • Check that SHUTTER of EXPOSURE SETUP menu is 'A.FLK' or 'MANUAL'.

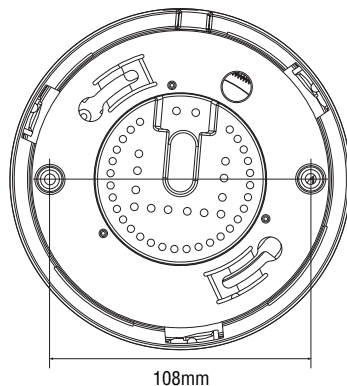
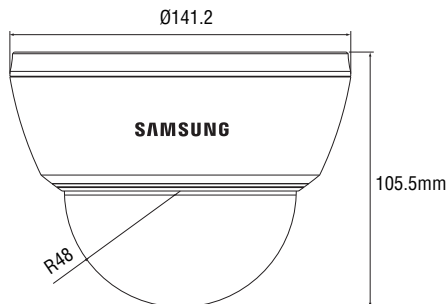
Troubleshooting

Problem	Solution																
The Motion Detection function does not work.	<ul style="list-style-type: none">• Check that MOTION DEF of SPECIAL SETUP menu is 'OFF'.																
Color is not correct.	<ul style="list-style-type: none">• Check the setting of WHITE BAL SETUP menu .																
The screen flickers continually.	<ul style="list-style-type: none">• Check that direction of camera turns toward the Sun .																
RS-485 communication fails.	<ul style="list-style-type: none">• Check the polarity between RS-485 Control Port and RS-485 cable.<table border="1"><thead><tr><th>485 Control Board Connection Port</th><th>RS-485 Control Port</th></tr></thead><tbody><tr><td>(+) CONNECTION TERMINAL (TRX+)</td><td>485+</td></tr><tr><td>(-) CONNECTION TERMINAL (TRX-)</td><td>485-</td></tr></tbody></table>• Check the RS-485 Communication establishment initial value<ul style="list-style-type: none">* RS-485 Communication establishment initial value<table border="1"><thead><tr><th>Item</th><th>Camera ID</th><th>BAUD RATE</th><th>UART MODE</th><th>PET PKT</th></tr></thead><tbody><tr><td>Initial value</td><td>1</td><td>9600</td><td>8-NONE-1</td><td>ENABLE</td></tr></tbody></table>• We recommend that you make ground connect between camera and controller in order to maintain safety communication control.	485 Control Board Connection Port	RS-485 Control Port	(+) CONNECTION TERMINAL (TRX+)	485+	(-) CONNECTION TERMINAL (TRX-)	485-	Item	Camera ID	BAUD RATE	UART MODE	PET PKT	Initial value	1	9600	8-NONE-1	ENABLE
485 Control Board Connection Port	RS-485 Control Port																
(+) CONNECTION TERMINAL (TRX+)	485+																
(-) CONNECTION TERMINAL (TRX-)	485-																
Item	Camera ID	BAUD RATE	UART MODE	PET PKT													
Initial value	1	9600	8-NONE-1	ENABLE													

Specifications

	SID-560N	SID-560P
POWER	Input voltage	DC12V
	Power consumption	2.5W
CCD	Size	Diagonal 6mm (1/3") Sony DS CCD
	Total Pixels	811(H) x 508(V)
	Effective Pixels	795(H) x 595(V)
Sync	Scanning System	2:1 Interlace
	Frequency	Horizontal:15.734 KHz Vertical:59.94 Hz
O.S.D		Korean, English, Japanese, Spanish
		English, French, Germany, Spanish, Italy, Chinese
E L E C T R I C A L	WDR	52 dB
	Back-light Compensation	ON / OFF
	Resolution	Color : 560 TV Lines ↑, B/W : 700 TV Lines ↑
	S/N (Y signal)	52 dB (AGC Off, Weight ON)
	Min. Illumination	0.001 Lux (Color Sens-up), 0.00004 Lux (B/W Sens-up) at F1.2
	White Balance	ATW / AWC / Manual / Outdoor / Indoor (1800°K ~ 10,500°K)
	Electronic Shutter Speed	1/60 ~ 1/120,000 sec
		1/50 ~ 1/120,000 sec
	Sens-up	AUTO / OFF (Selectable limit x2 ~ x256)
	Gain Control	LOW/HIGH/OFF
	SSNR	ON / OFF (1~32 Level)
	Motion Detection	ON / OFF (8 Zone, ALARM Output)
	PRIVACY	ON / OFF (8 Zone)
	V-REV (Mirror)	ON / OFF
	H-REV (Flip)	ON / OFF
	FREEZE	ON / OFF
	SHARPNESS	ON / OFF (Level Adjustable)
	IRIS Control	DC drive Lens
	Day & Night	COLOR / Black & White / AUTO
	DIS	ON / OFF
Communication	Digital Zoom	ON / OFF (x10)
	Blemish Compensation	256 point (Even 128 Point, Odd 128 Point)
		RS-485 (2400, 4800, 9600, 19200, 38400, 57600 bps selectable)
		(STW Protocol, Pelco-D Protocol available)
	Built-in Lens	x2.5 Vari-focal Lens (F1.2 f3.8~9.5mm)
	Lens angle of view	37.3° ~ 95.5°
	Monitoring angle	PAN
		Manual 0° ~ 340°
	TILT	Manual 0° ~ 146°
Operating	Temperature/Humidity	-10°C to +50°C / 30% to 80% RH
	Storage Temperature/Humidity	-20°C to +60°C / 20% to 90% RH
Dimension		Ø141.2 X 105.5 mm
	Weight	525g

Dimension



DECLARATION OF CONFORMITY

Application of Council Directive(s)	89 / 336 / EEC
Manufacturer's Name	SAMSUNG TECHWIN CO., LTD
Manufacturer's Address	SAMSUNG TECHWIN CO., LTD 42, SUNGJU-DONG CHANGWON-CITY, KYUNGNAM, KOREA, 641-716
European Representative Name	
European Representative Address	
Equipment Type/Environment	CCTV Camera
Model Name	SID-560
Beginning Serial NO.	S712001
Year of Manufacture	2007. 12. 1
Conformance to	EN 50081-1 : 1992 EMC-Directive 89/336 EEC and 92/31/EEC EN 50130-4 : 1996

We, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s).

Manufacturer	SAMSUNG TECHWIN CO., LTD	Legal Representative in Europe
Signature	<i>Young Taek, SON</i>	Signature
Full Name	YOUNG TAEK SON	Full Name
Position	QUALITY CONTROL MANAGER	Position
Place	CHANGWON, KOREA	Place
Date	2007. 12. 1	Date

MEMO